

DESCRIPTION

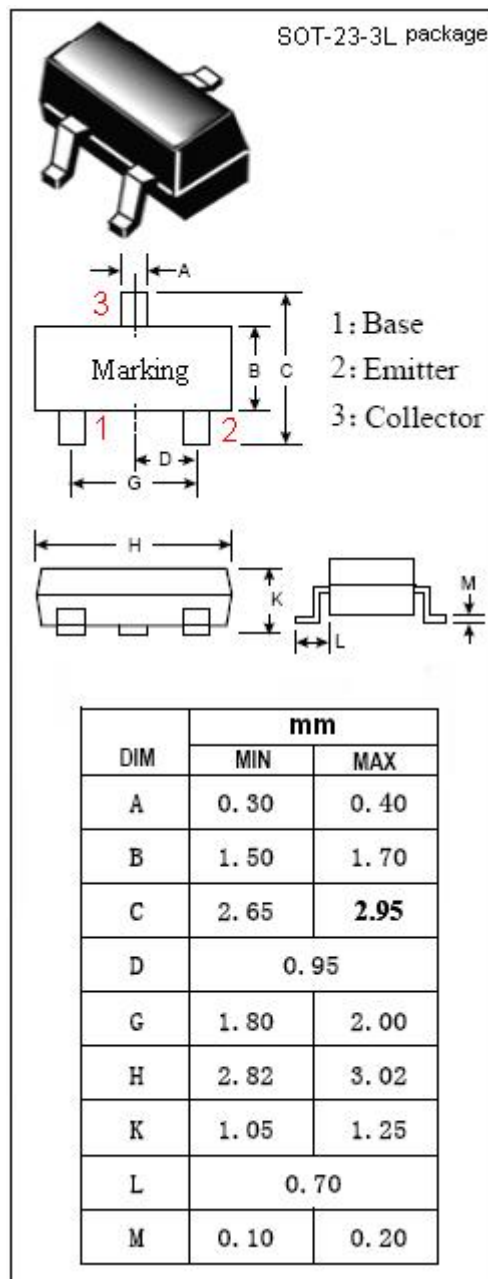
- Silicon NPN epitaxial type
- Local oscillator wide band amplifier
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use in UHF/VHF frequency converters

ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|---|---------|--------------------|
| V_{CBO} | Collector-Base Voltage | 30 | V |
| V_{CEO} | Collector-Emitter Voltage | 20 | V |
| V_{EBO} | Emitter-Base Voltage | 3 | V |
| I_c | Collector Current-Continuous | 50 | mA |
| P_c | Collector Power Dissipation @ $T_c=25^{\circ}\text{C}$ | 0.15 | W |
| T_J | Junction Temperature | 150 | $^{\circ}\text{C}$ |
| T_{stg} | Storage Temperature Range | -55~150 | $^{\circ}\text{C}$ |



ELECTRICAL CHARACTERISTICST_c=25°C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|---|-----|------|-----|------|
| V _{CE(sat)} | Collector-Emitter Saturation Voltage | I _C = 20mA ; I _B = 4mA | | | 1.0 | V |
| I _{CBO} | Collector Cutoff Current | V _{CB} = 10V; I _E = 0 | | | 0.5 | μ A |
| h _{FE} | DC Current Gain | I _C = 10mA ; V _{CE} = 10V | 40 | | | |
| f _T | Current-Gain—Bandwidth Product | I _C = 10mA ; V _{CE} = 10V | | 1200 | | MHz |
| C _{OB} | Output Capacitance | I _E = 0 ; V _{CB} = 10V; f= 1.0MHz | | | 1.5 | pF |
| CG | Conversion Gain | V _{CC} =12V, I _C =2mA; f=200MHz; f _{osc} =230MHz; | | 21 | | dB |
| NF | Noise Figure | V _{CC} =12V, I _C =2mA; f=200MHz; f _{osc} =230MHz; | | 6.5 | | dB |

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